Crocodile and Alligator Trade
by the United States
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Crocodile and Alligator Trade by the United States 1981

by

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INTRODUCTION

The order Crocodylia contains 21 species of alligators, crocodiles and gavials, and includes the largest living reptiles. Possessing thick, durable hides, crocodilians are in great demand by the leather industry for the production of shoes, handbags and other leather products. There is also some demand for baby caimans for the pet trade. All crocodilians currently receive some degree of protection. For example, both families in the order are listed on Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)- trade is allowed if a permit has been obtained from the exporting country. Fifteen species and an additional two subspecies are listed on CITES Appendix I (see Appendix A)- commercial trade of these species is prohibited. Thirteen species and another seven subspecies are protected by the U.S. Endangered Species Act, which also prohibits commercial trade.

As the market for crocodilian products grows and suitable habitat decreases, the pressure on remaining crocodilian populations increases. In 1981 alone, the value of crocodilian skins, products and live animals imported to the U.S. was over US$9 million. More stringent controls may be required if present population levels are to be maintained.

This report summarizes the quantities, value and origin of crocodile and American alligator skins, products and live animals commercially traded by the U.S. during 1981, and discusses country of origin and species discrepancies.

U.S. Imports of Live Crocodilians, excluding American Alligators

In 1981, the United States imported 15,553 live crocodilians in 17 shipments. In comparison, over 112,000 and 137,000 were imported in 1970 and 1971, respectively, illustrating nearly a ten-fold decline in just over a decade (Table 1).

It is also apparent that both the number of species and the number of countries supplying live crocodilians has decreased since 1970 (Tables 1 and 2). Nine species were imported in 1970 and ten were imported in 1971, compared to only two in 1979 and three in 1981 (Table 2). The U.S. received crocodilians from 15 countries in 1970, 20 in 1971, but from only four in 1979, six in 1980, and two in 1981 (Table 1).

The data in Table 2 suggests that the spectacled caiman, Caiman crocodilus, has been the major species imported by the U.S. over the last 12 years. In 1981, Caiman crocodilus crocodilus from Colombia accounted for 99.9% of all crocodilian imports. The major source of live caimans in 1980 was Guatemala (10,012 specimens or 47.9%), although Colombia and Curacao* each provided approximately 5,000 caimans. In 1979, Panama was the source of nearly all live caimans imported by the U.S., supplying 98.3% of the total for that year (Table 1).

The decrease in the number of live crocodilians imported by the U.S. is probably due to export restrictions implemented by many countries over the last decade. For example, Panama, the major exporter of caimans to the U.S. in 1979, banned the export of all wildlife and wildlife products in January 1980 (Resolution DIR. 002-80). Consequently, the U.S. did not import any caimans with Panama declared as the country of origin in 1980 or 1981. Guatemala, the major exporter of caimans in 1980, is currently enforcing existing export regulations (Swift, in press). As a result, no live crocodilians entered the U.S. in 1981 with Guatemala as the declared country of origin. Colombia provided over 100,000 live caimans to the U.S. in 1970 and again in 1971. The number of caimans exported to the U.S. has declined since then because of a 1974 Colombian ban on the export of most live animals, including crocodilians (Donadio, 1982). This law has not been adequately enforced, however, as evidenced by all the shipments of live caimans imported by the U.S. between 1979 and 1981, accompanied by Colombian permits.

U.S. Imports of Crocodilian Skins and Manufactured Products, excluding American Alligators

a. Declared Origins

In 1981, the U.S. imported 107,179 crocodilian skins and 143,727 crocodilian products in 1,129 shipments. The largest number of raw skins originating from a single country were derived from Bolivian caimans

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* Caimans do not occur in Curacao (Groombridge, 1981).

(31.4%). Skins of Paraguayan and Colombian caimans made up an additional 29.6% and 16.5% of the trade respectively (Table 3).

Import figures demonstrate a change in the countries supplying the majority of caimans over the last three years. Most of the skins imported in 1980, however, were of Panamanian (56.5%), Paraguayan (12.9%) and Colombian(12.8%) origin (TRAFFIC(U.S.A.), unpubl. data). In 1979, most skins were of Paraguayan (61.3%) or unknown (35.2%) origin (1979 U.S. CITES report).

Over 60% (68,165) of the skins imported by the U.S. in 1981 came directly from the declared country of origin, rather than from re-exporting countries. Bolivia supplied over 33,000 skins, 49.3% of the total skins imported directly (Table 4). The final destination of these skins is unknown, as U.S. companies probably could not process them all (68,165)* and most of these skins did not appear as 1981 U.S. re-exports.

In 1981, products made of Colombian caiman skins were imported in the greatest numbers (70,323) and constituted 48.9% of all crocodilian products imported. Lesser quantities were manufactured from skins of British West Indies† caimans (12.7%) and Papua New Guinea crocodiles (8.1%; Table 4).

It is difficult to detect any shifts in the product trade in 1981 compared to the two previous years because in past years, many shipments of crocodilians were imported with no country of origin declared. In 1981, only 0.4% of the crocodilian manufactured products were imported with no declared country of origin. By contrast, in 1980 most of the manufactured products were of unknown (60.3%), Bolivian (20.7%) or Colombian (8.5%) origin (TRAFFIC(U.S.A.), unpubl. data). In 1979, most manufactured products were from unknown countries of origin (80.2%) and Mexico(10.8%)(1979 U.S. CITES report).

b. Species in Trade

Hides of the spectacled caiman, Caiman crocodilus, accounted for 89.1% of the skins and 89.7% of the manufactured products imported to the U.S. in 1981 (Table 5). Brazaitis (1973) has taxonomically divided the spectacled caiman into four subspecies, three of which appeared in trade in 1981. The most frequently imported subspecies was declared as Caiman c. crocodilus; over 95,000 raw or tanned skins and more than 122,000 products entered the U.S. in 1981 (Table 5). Much smaller quantities of both skins and products declared as the brown caiman, C. c. fuscus, and the yacare caiman, C. c. yacare, were imported.

The New Guinea crocodile, Crocodylus novaeguineae, was the next most commonly declared species, making up 10.6% of the crocodilian skins and 7.4% of the manufactured products in trade. Minor quantities of seven other species were also imported (Table 5).

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* The U.S. has a very limited capacity to process crocodilian hides (Brazaitis, pers. comm.).

† Caimans do not occur in the British West Indies (Groombridge, 1981).

Declared Value of Crocodilian Imports - excluding American alligators

The declared value of all crocodilian skins, manufactured products and live animals imported to the U.S. in 1981 was over US$9 million (Table 4). Crocodilian skins and products re-exported from France to the U.S. accounted for over US$4 million and those from Italy were valued at nearly US$3 million.

Skins of Papua New Guinea crocodiles were the most valuable; the average declared value was US$261 per skin. These skins represented only 4.0% of all crocodilian items imported, but 30.8% of the total value of all imported items. The value of these skins is reflected in the declared value of products manufactured from Papua New Guinea crocodiles. The average declared value of US$115 per product was more than the value of products made from any other country's crocodilians. The total value of all skins and products of Papua New Guinea crocodiles was over US$4 million.

Skins, products, and live animals of Colombian origin accounted for the second highest total declared value of all crocodilian items imported in 1981. This amounted to over US$1.5 million, representing 18.5% of the total value of all crocodilian imports.

Trade Routes

Seventeen countries re-exported crocodilian skins and products to the U.S. in 1981. France re-exported the largest number of skins (30,336), and Italy supplied the largest quantity of manufactured products (52,352; Table 6). Italy was the only other major re-exported of skins. Other significant re-exporters of products include Switzerland, Austria, and France.

Based on declared origins on import documents, the major supply routes in 1981 for all crocodilian items from the source, to the processing country, to the U.S. were:

(1) Colombia → Italy → U.S.
(2) Colombia → Austria → U.S.
(3) British West Indies → France → Switzerland → U.S.

Many crocodilian skins passed through at least two European countries before reaching the U.S. as manufactured products (Table 7). Switzerland, for example, often imports crocodilian products from other European countries before exporting them to the U.S. The routing of crocodilian skins and products through so many countries before reaching the U.S. may in part, explain the large volumes of imports with country of origin discrepancies.

Ports of Entry

The majority of both crocodilian skins (87.4%) and products (81.5%) entered through the port of New York. The only other port of significance was Miami, where 9.1% of the products, 9.2% of the skins and 100% of the live animals entered the U.S. Between 2% and 3% of the skins and products passed through each of the ports of Chicago, Honolulu, and Los Angeles. (Table 8).

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Declared Country of Origin and Species Discrepancies

Many crocodilian shipments entered the U.S. with declared countries of origin that are not within the reported range of the species declared. It cannot be determined whether the countries of origin or the species names were incorrectly listed. For example, the spectacled caiman, Caiman crocodilus crocodilus, occurs in only nine South American countries and Trinidad and Tobago (Brazaitis, pers. comm.) Eleven countries where these caimans do not occur, however, also appeared on the 3-177 forms as the country of origin, (Table 5). Imports from these countries accounted for 30,561 manufactured items, or 21.3% of all crocodilian manufactured products imported.

More than 65,000 skins and over 17,000 manufactured items of C. c. crocodilus were declared as Bolivian or Paraguayan in origin. C. c. crocodilus does not occur in Paraguay, and according to caiman specialists, is not found in large enough quantities to be commercially exploited in Bolivia (Brazaitis, pers. comm.). The items were most likely C. c. crocodilus, illegally taken in Brazil (Brazaitis, pers. comm.) or yacare caimans, C. c. yacare, a subspecies found in both Bolivia and Paraguay. Caiman c. yacare is listed on the U.S. Endangered Species Act and is prohibited from import into the U.S. Pending further investigation of the current ranges of all C. crocodilus subspecies, the U.S. stopped accepting shipments of C. c. crocodilus skins and products of Bolivian and Paraguayan origin in August 1981.

The British West Indies and Argentina were also declared as countries of origin for imports of C. c. crocodilus skins and products. The American crocodile, Crocodylus acutus, an endangered species, is the only species known to occur in the British West Indies (Groombridge, 1981). C. c. yacare and the broad-nosed caiman, C. c. latirostris are the only crocodilians known to occur in Argentina (Brazaitis, pers. comm.). Both are prohibited from import by the U.S. Endangered Species Act. Additionally, domestic legislation in Argentina prohibits the export of crocodilians (TRAFFIC(U.S.A.),1982).

Crocodilian Shipments Denied Entry

Thirty-four commercial shipments consisting of 1,607 manufactured and 296 raw crocodilian items were denied entry in 1981. Most seizures were of crocodilians declared to be spectacled caimans, but seven other species and eleven countries of origin were also involved (Table 9). The shipments usually lacked proper CITES documents, but many Caiman crocodilus were denied entry because they were believed to be C. c. yacare, a subspecies banned from import by the U.S. Endangered Species Act.

American Alligator Trade

The American alligator, Alligator mississippiensis, is one of two crocodilians indigenous to the U.S., and is the only U.S. species that may be commercially exploited for the skin trade. Because of declining populations in past years as a result of excessive hunting and posching, the American alligator was classified as Endangered throughout its range in 1967 under the U.S. Endangered Species Act. Effective management and enforcement of laws resulted in the partial or complete recovery of many alligator populations. Subsequently, the species was reclassified over a period of five years (1975 - 1979) to "Threatened" or "Threatened by Similarity of Appearance" status in some areas (Fed. Reg., 1979 and 1981). In 1979, the American alligator was transferred from CITES Appendix I to Appendix II at the second meeting of the parties. As a result, American alligator skins could again enter international trade.

The export of American alligator skins resumed in 1979, when a total of 5,404 skins were shipped from the U.S. (Table 10). The number of skins exported climbed to 29,449 in 1981 with France maintaining its status as the primary receiver of skins for the third consecutive year. France was the sole importer of American alligator skins in 1979. In 1981, France received over 16,000 skins, while Italy and Japan imported 9,684 and 3,186 skins, respectively. Other countries importing alligator skins directly from the U.S. in 1981 included the United Kingdom, Hong Kong and West Germany. The 1981 total declared value of American alligator skin exports amounted to US$4,660,258 (Table 10).

A large portion of all American alligator skins are tanned in France and Italy and many skins are then re-imported by the U.S. for the manufacture of leather goods. The U.S. re-imported 7,451 tanned skins from France and 6,290 from Italy in 1981. The number of skins imported amounted to almost half as many as were exported during the year and had a declared value of US$1,807,752 (Table 11).

While trade in American alligator skins is substantial, few manufactured products are exported or re-imported by the U.S. The total U.S. trade of American alligator products amounts to less than 5% of total imports and exports of raw or tanned skins. Still, the quality of the skin makes A. mississippiensis one of the most valuable reptiles to the leather industry worldwide.

SUMMARY

U.S. imports of live crocodilians decreased from over 112,000 in 1970 to about 15,000 in 1981. Imports of crocodilian skins and manufactured products, however, have increased over the last two years. The most frequently exploited species in 1981 was the spectacled caiman, Caiman crocodilus; it accounted for over 99% of the live animals, and nearly 90% of both the skins and manufactured products imported. Colombia directly exported to the U.S. almost all of the live crocodilians imported in 1981, and was the country of origin of nearly 50% of the products imported. Bolivia was the country of origin of most of the raw skins imported. Italy and France were the largest exporters of skins and products to the U.S. in terms of both the total number of items and the total value of all goods imported. Most items entered the U.S. through the port of New York. Approximately one third of the caimans arrived with declared countries of origin outside the natural range of the species. This may be a serious problem, since these declarations may be concealing the importation of endangered species. The American alligator entered international trade again in 1979, after a series of changes in its status. Almost 30,000 skins were exported from the U.S. in 1981.

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Table 1. U.S. Live Crocodilian Imports, 1970, 1971, 1979 - 1981, arranged by country of origin.

COUNTRY OF ORIGIN	YEAR 1970	1971	1979	1980	1981
Argentina	4				
Brazil	1				
Cameroon		28			
Canada	2				
Colombia	105,982	136,665		5,280	15,521
Costa Rica		3			
Curacao	6,020			4,700	
Dahomey	1	10			
Egypt	1				
Guyana	276	64		590	
El Salvador				60	
Haiti		5			
Ghana	2	7			
Guatemala			780	10,012	
Japan				275	
Indonesia		10	50		
Liberia		7			
Malaysia	8	2			
Netherlands		1			
Nicaragua	10	190			
Pakistan		4			
Panama		32	50,588		
Paraguay		72			
Poland	1				
Singapore	52	73			
Sri Lanka	5	3			
Suriname					20
Thailand	33	25	1		
Trinidad		1			
United Kingdom		1			
Unknown					12
TOTAL	112,398	137,203	51,419	20,917	15,553

Sources:
1970,1971 - Busack, 1974.
1979 - U.S. CITES Annual Report.
1980, 1981 - TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation/Exportation forms, Law Enforcement Division, Fish & Wildlife Service, U.S. Department of the Interior.

Table 2. U.S. Live Crocodilian Imports, 1970, 1971, 1979, 1981, arranged by species.

SPECIES	YEAR 1970	1971	1979	1981
Alligator sinensis		1		
Caiman crocodilus	112,212	136,996	55,571	15,531
Caiman spp.	1			
Melanosuchus niger		8		
Paleosuchus trigonatus	32	2		14
P. palpebrosus				8
Crocodylus acutus	52	21		
C. moreletti	2			
C. niloticus	1	7		
C. porosus	13	24	51	
C. siamensis	39	48		
Crocodylus spp.	3			
Osteolaemus tetraspis	3	46		
Tomistoma schlegelii	44	46		
TOTAL	112,402	137,199	55,622	15,553

Sources:
1970, 1971 - Busack, 1974.
1979 - 1979 U.S. CITES Annual Report.
1980, 1981 - TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation/Exportation forms, Law Enforcement Division, Fish & Wildlife Service, U.S. Department of the Interior.

country of origin and country of export.

DECLARED COUNTRY OF ORIGIN	COUNTRY OF EXPORT	LIVE	RAW OR TANNED SKIN	MANUFACTURED PRODUCTS	DECLARED VALUE (US $)
Argentina	France		2	22	933
	Italy		10	118	6,700
	Spain			189	2,307
	West Germany			105	3,235
	SUBTOTAL		12	434	13,175
Bolivia	Bolivia		33,611		263,646
	France			2,074	26,626
	Greece			946	20,141
	Hong Kong			2,702	50,750
	Italy			2,432	83,880
	Korea			30	643
	Switzerland			10	78
	United Kingdom			115	1,970
	West Germany			85	17,429
	SUBTOTAL		33,611	8,394	465,163
Brazil	Austria			117	2,934
	France			208	19,492
	Italy			15	2,280
	Japan		4		138
	Switzerland			5,709	49,647
	West Germany			88	8,065
	SUBTOTAL		4	6,137	82,556
British West Indies	France		1,500	1,561	39,709
	Switzerland			16,659	49,553
	SUBTOTAL		1,500	18,220	89,262
Colombia	Austria			20,893	127,968
	Colombia	15,521	9,864	9,744	193,032
	France			3,908	73,255
	Italy		7,753	32,472	1,180,485
	Japan			252	11,189
	Netherlands			399	1,567
	Spain			1,470	25,733
	Switzerland			619	2,358
	West Germany		18	536	49,301
	Unknown			30	2,475
	SUBTOTAL	15,521	17,635	70,323	1,667,363
Costa Rica	Unknown			4	210
	SUBTOTAL			4	210
France	France		50		13,325
	West Germany	12			2,400
	SUBTOTAL	12	50		15,725

Table 3 (cont.).

DECLARED COUNTRY OF ORIGIN	COUNTRY OF EXPORT	LIVE	RAW OR TANNED SKIN	MANUFACTURED PRODUCTS	DECLARED VALUED (US $)
French Guiana	France		9,599	365	285,104
	Italy			419	85,261
	Spain			5,292	151,087
	United Kingdom			2	77
	SUBTOTAL		9,599	6,078	521,529
Guyana	France			200	16,783
	SUBTOTAL			200	16,783
Hong Kong	Hong Kong			601	13,530
	SUBTOTAL			601	13,530
India	Unknown			6	595
	SUBTOTAL			6	595
Indonesia	France		1,729	1	385,924
	Italy			72	14,760
	West Germany			1	874
	SUBTOTAL		1,729	74	401,558
Italy	Italy			133	3,868
	Spain			26	574
	SUBTOTAL			159	4,442
Madagascar	France			24	5,937
	SUBTOTAL			24	5,937
Malaysia	Italy			4	1,983
	West Germany			35	12,403
	SUBTOTAL			39	14,386
Nigeria	Italy			147	4,546
	Nigeria			13	120
	SUBTOTAL			160	4,666
Panama	Italy			1,833	170,148
	Panama			725	8,732
	Switzerland			120	8,381
	SUBTOTAL			2,678	187,261
Papua New Guinea	Austria			9	1,590
	France		10,633	2,072	3,150,790
	Italy			5,069	798,004
	Japan		12	4	1,625
	Mexico		2		819
	Spain			249	57,096
	Switzerland			3,769	52,004
	United Kingdom			39	8,657
	West Germany			393	40,354
	SUBTOTAL		10,647	11,604	4,110,945

Table 3 (cont.).

DECLARED COUNTRY OF ORIGIN	COUNTRY OF EXPORT	LIVE	RAW OR TANNED SKIN	MANUFACTURED PRODUCTS	DECLARED VALUE (US $)
Paraguay	Austria			19	488
	Canada			1,151	7,842
	France		6,823	47	192,278
	Italy		14	8,142	419,196
	Japan		174	45	9,253
	Paraguay		24,689		40,117
	Spain			417	24,941
	Switzerland			30	62
	United Kingdom		20		811
	Uruguay			50	1,137
	West Germany			62	14,558
	SUBTOTAL		31,720	9,963	710,683
Peru	France			8	8,700
	Switzerland			4,856	343,407
	SUBTOTAL			4,864	352,107
Senegal	Senegal			2	6
	SUBTOTAL			2	6
Singapore	France			25	20,031
	Greece			284	4,686
	Italy			1	456
	Singapore		33	851	17,696
	West Germany		138	186	14,743
	SUBTOTAL		171	1,347	57,612
South Africa	Italy			9	3,789
	Unknown			12	
	SUBTOTAL			21	3,789
Suriname	Italy			1,294	87,713
	Suriname	20			1,698
	SUBTOTAL	20		1,294	89,411
Thailand	Thailand		1		263
	SUBTOTAL		1		263
Venezuela	Italy			140	28,350
	Spain			324	2,241
	SUBTOTAL			464	30,591
Unknown	France			178	33,469
	Italy		500	52	7,794
	Mexico			4	100
	South Africa			2	25

Table 3 (cont.).

DECLARED COUNTRY OF ORIGIN	COUNTRY OF EXPORT	LIVE	RAW OR TANNED SKIN	MANUFACTURED PRODUCTS	DECLARED VALUE (US $)
Unknown (con't.)	Switzerland			331	101,905
	Thailand			3	180
	Unknown			27	2,900
	SUBTOTAL			597	144,947
United States	France			40	8,782
	SUBTOTAL			40	8,782
				401	113,767
	GRAND TOTAL	15,553	107,179	143,727	9,014,703

Source: TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation/ Exportation forms, Law Enforcement Division, Fish & Wildlife Service, U.S. Department of the Interior.

Table 4. 1981 U.S. Direct Imports of Crocodilian Skins, Products and Live Animals, arranged by country of origin.

COUNTRY OF ORIGIN*	LIVE	MANUFACTURED PRODUCTS	RAW SKINS	VALUE (US $)
Bolivia			33,611	263,646
Colombia	15,521	9,744	9,864	193,032
Nigeria		13		120
Panama		725		8,732
Paraguay			24,689	40,117
Senegal		2		6
Suriname	20			1,698
Thailand			1	263
TOTAL	15,541	10,484	68,165	$507,614

* These figures do not include crocodilians imported with declared countries of origin of France, Hong Kong, Italy, Singapore where crocodilians are not known to occur in the wild.

Source: TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation/Exportation forms, Division of Law Enforcement, Fish & Wildlife Service, U.S. Department of Interior.

Table 5. 1981 U.S. Imports of Crocodilian Skins and Products - arranged by species and country of origin

SPECIES		DECLARED COUNTRY OF ORIGIN	SKINS	MANUFACTURED PRODUCTS
Caiman crocodilus crocodilus (Spectacled caiman)	*	Argentina	12	226
		Bolivia	33,611	7,960
		Brazil	4	6,109
	*	British West Indies	1,500	18,220
		Colombia	17,575	67,426
		French Guiana	9,599	6,078
		Guyana		200
	*	Hong Kong		600
	*	Indonesia	500	
	*	Italy		133
	*	Nigeria		51
	*	Panama		845
	*	Papua New Guinea	513	192
	*	Paraguay	31,432	9,403
		Peru		4,864
	*	Singapore	33	851
		Suriname		1,294
	*	U.S.A.		40
		Venezuela		140
		South America		8
		Unknown	500	186
		SUBTOTAL	95,279	124,826
Caiman crocodilus fuscus (Brown caiman)	*	Argentina		208
	*	Bolivia		2
		Colombia	60	2,581
		Panama		1,793
	*	Paraguay		115
		Venezuela		324
		SUBTOTAL	60	5,023
Caiman crocodilus yacare (Yacare caiman)		Bolivia		127
	*	Colombia		6
	*	Italy		26
	*	Nigeria		96
		Paraguay	174	192
		SUBTOTAL	174	447
Caiman crocodilus (Spectacled caimans)		Bolivia		300
		Colombia		312
		Costa Rica		4
	*	Malaysia		4
		Paraguay		210
		SUBTOTAL		761
Paleosuchus sp. (Smooth-fronted caimans)	*	Paraguay		40
		Colombia		98
		SUBTOTAL		138
Crocodylus acutus (American crocodile)		Papua New Guinea		1
	*	Paraguay		3
		SUBTOTAL		4

Table 5 (cont.).

SPECIES	DECLARED COUNTRY OF ORIGIN	SKINS	MANUFACTURED PRODUCTS
Crocodylus niloticus (Nile crocodile)	Senegal		2
	South Africa		6
	SUBTOTAL		8
Crocodylus novaeguineae (New Guinea crocodile)	* Bolivia		5
	* Brazil		28
	* France	50	
	* Hong Kong		1
	Indonesia	1,229	62
	* Madagascar		24
	* Malaysia		35
	* Panama		40
	Papua New Guinea	10,130	9,871
	* Singapore		490
	Unknown		77
	SUBTOTAL	11,409	10,633
Crocodylus porosus (Salt-water crocodile)	Indonesia		12
	Papua New Guinea	4	1,540
	* Singapore		6
	SUBTOTAL	4	1,558
Crocodylus siamensis (Siamese crocodile)	Thailand	1	
Osteolaemus tetraspis (West African dwarf crocodile)	Nigeria		7
	* South Africa		6
	Africa		6
	SUBTOTAL		19
Crocodylus spp. (Crocodile)	Nigeria		6
	South Africa		9
	Unknown		289
	SUBTOTAL		304
Gavialus gangeticus (Gavial)	India		6
TOTAL		107,179	143,727

* Species not found in this country (Brazaitis, pers. comm.; Groombridge, 1981).

Source: TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation/Exportation forms, Fish & Wildlife Service, U.S. Dept. of the Interior.

TABLE 6. 1981 U.S. Imports of Crocodilian Skins, Products and Live Animals, arranged by country of export.

DECLARED COUNTRY OF EXPORT	LIVE	RAW OR TANNED SKIN	MANUFACTURED PRODUCTS	DECLARED VALUE (U.S. $)
Austria			21,038	132,986
Bolivia		33,611		263,646
Canada			1,151	7,842
Colombia	15,521	9,864	9,744	193,032
France		30,336	10,733	4,280,425
Greece			1,230	24,827
Hong Kong			3,303	64,280
Italy		8,277	52,352	2,898,500
Japan		190	301	22,205
Korea			30	643
Mexico		2	4	919
Netherlands			399	1,567
Nigeria			13	120
Panama			725	8,732
Paraguay		24,689		40,117
Senegal			2	6
Singapore		33	851	17,696
South Africa			2	25
Spain			7,967	263,405
Suriname	20			1,698
Switzerland			32,103	607,395
Thailand		1	3	443
United Kingdom		20	156	11,515
Uruguay			50	1,137
West Germany	12	156	1,491	163,362
Unknown			79	8,180
TOTAL	15,553	107,179	143,727	9,014,703

Source: TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation forms, Law Enforcement Division, Fish & Wildlife Service, U.S. Dept. of the Interior.

Table 7. 1981 U.S. Imports of Crocodilian Products, arranged by country of origin, source country* and country of re-export.

COUNTRY OF ORIGIN	SOURCE* COUNTRY	COUNTRY OF RE-EXPORT	QUANTITY
Bolivia	France	W.Germany	51
	Italy	W.Germany	34
	Italy	Switzerland	3
	U.S.	Greece	338
Brazil	France	Switzerland	4,768
British West Indies	France	Switzerland	11,614
Colombia	France	Switzerland	619
	France	W.Germany	29
	Italy	W.Germany	74
Malaysia	France	W.Germany	28
Papua New Guinea	France	Switzerland	2,343
	France	Italy	28
	France	W.Germany	5
	Switzerland	W.Germany	41
	Singapore	France	55
	U.S.	France	3
Paraguay	Italy	Switzerland	24
	France	W.Germany	39
Peru	Italy	Switzerland	2,466
	France	Switzerland	1,042
Singapore	France	W.Germany	162
	Italy	W.Germany	2
TOTAL			38,521

* Source Country - the country that supplied the skins or products to the re-exporting country.

Source: TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation/ Exportation forms, Division of Law Enforcement, Fish and Wildlife Service, U.S. Department of Interior.

Table 8. 1981 U.S. Imports of Live Crocodilians, Skins and Products, arranged by port of entry.

PORT OF ENTRY	LIVE	RAW OR TANNED SKINS	MANUFACTURED PRODUCTS
Boston			308
Chicago		500	3,043
Dallas/Ft.Worth		930	1,048
El Paso		2	
Honolulu			3,359
Houston			6
Laredo			4
Los Angeles			3,162
Miami	15,553	9,864	12,921
Minneapolis			5
New Orleans			330
New York		93,679	117,506
San Francisco			655
Seattle			96
Other		2,204	1,284
TOTAL	15,553	107,179	143,727

Source: TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation/ Exportation Forms, Law Enforcement Division, U.S. Fish & Wildlife Service, U.S. Dept. of the Interior.

Table 9. Crocodilian Skins and Products Denied Entry into the U.S. in 1981, arranged by species, country of origin, and country of export.

DECLARED SPECIES	DECLARED COUNTRY OF ORIGIN	COUNTRY OF EXPORT	QUANTITY	TYPE
Caiman crocodilus crocodilus	Argentina	France	20	manuf
	Bolivia	France	91	manuf
	Nigeria	Italy	3	manuf
	Paraguay	Austria	19	manuf
		Italy	107	manuf
		Switzerland	30	manuf
	Singapore	Singapore	499	manuf
		Singapore	21	raw
Caiman c. yacare	Bolivia	Italy	127	manuf
	Nigeria	Italy	96	manuf
	Paraguay	Japan	174	raw
		Spain	108	manuf
		Uruguay	50	manuf
		Unknown	100	raw
Caiman crocodilus	Costa Rica	Unknown	4	manuf
	Malaysia	Italy	4	manuf
	Paraguay	Spain	210	manuf
	Unknown	South Africa	2	manuf
		Switzerland	24	manuf
Crocodylus acutus	Paraguay	Italy	3	manuf
Crocodylus niloticus	Senegal	Senegal	2	manuf
	South Africa	Unknown	6	manuf
Crocodylus novaeguineae	Papua New Guinea	France	8	manuf
		Italy	3	manuf
		Switzerland	1	manuf
Crocodylus porosus	Indonesia	Italy	12	manuf
	Singapore	France	5	manuf
Crocodylus siamensis	Thailand	Thailand	1	raw
Osteolaemus tetraspis	Nigeria	Unknown	7	manuf
	South Africa	Unknown	6	manuf
	Africa	Africa	6	manuf
Gavialus gangeticus	India	Unknown	6	manuf
Crocodile	Nigeria	Unknown	6	manuf
	Unknown	France	66	manuf
		Mexico	4	manuf
		Switzerland	72	manuf
		TOTAL	1,903	

Source: TRAFFIC(U.S.A.) analysis of 3-177 Declaration of Importation/Exportation Forms, Law Enforcement Division, U.S. Fish & Wildlife Service, U.S. Department of the Interior.

Table 10. Exports of American Alligator Skins in 1979 and 1981, arranged by country of import.

COUNTRY OF IMPORT	NUMBER OF SKINS 1979	1981	DECLARED VALUE (US $; 1981 only)
France	5,404	16,290	2,799,693
		(+ 3,895 lbs.)	
Hong Kong		38	10,450
Italy		9,684	1,412,532
Japan		3,196	407,650
United Kingdom		246	29,462
West Germany		5	471
	5,404	29,449	4,660,258
		(+ 3,895 lbs.)	

Table 11. Imports of Tanned American Alligator Skins in 1981, arranged by country of re-export.

COUNTRY OF RE-EXPORT	NUMBER OF SKINS	DECLARED VALUE (US $)
France	7,451	1,518,318
Italy	6,290	289,434
TOTAL	13,741	1,807,752

Source: TRAFFIC(USA) analysis of 3-177 Declaration of Importation/Exportation forms, Law Enforcement Division, Fish & Wildlife Service, U.S. Department of Interior.

Appendix A. Status of all Crocodilian Species listed on the U.S. Endangered Species Act (ESA), the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), and the IUCN Red Data Book (RDB).

SPECIES	ESA	CITES APP.	RDB
FAMILY: Alligatoridae			
Alligator mississippiensis American alligator	E/T/ T(S/A)*	II	O
Alligator sinensis Chinese alligator	E	I	E
Caiman crocodilus apaporiensis Rio Apaporis caiman	E	I	E
Caiman crocodilus crocodilus Spectacled caiman		II	E
Caiman c. yacare Yacare caiman	E	II	E
Caiman c. fuscus Brown caiman		II	E
Caiman latirostris Broad-nosed caiman	E	I	I
Melanosuchus niger Black caiman	E	I	E
Paleosuchus palpebrosus Dwarf caiman		II	V
Paleosuchus trigonatus Schneider's smooth-fronted caiman		II	V
FAMILY: Crocodylidae			
Crocodylus acutus American crocodile	E	I	E
Crocodylus cataphractus African sharp-nosed crocodile	E	I	E
Crocodylus intermedius Orinoco crocodile	E	I	E
Crocodylus johnsoni Johnson's crocodile		II	V
Crocodylus moreletii Morelet's crocodile	E	I	E
Crocodylus niloticus Nile crocodile	E	I	V
Crocodylus novaguineae mindorensis Phillippines crocodile	E	I	I
Crocodylus n. novaeguineae New Guinea crocodile		II	V
Crocodylus palustris kimbula Ceylon mugger crocodile	E	I	V
Crocodylus p. palustris Mugger crocodile	E	I	E
Crocodylus porosus Salt-water crocodile	E†	I†	V
Crocodylus rhombifer Cuban crocodile	E	I	E

Appendix A (cont.).

SPECIES	ESA	CITES APP.	RDB
Crocodylus siamensis Siamese crocodile	E	I	E
Osteolaemus tetraspis West African dwarf crocodile		I	E
Tomistoma schlegelii False gavial	E	I	E
FAMILY: Gavialidae Gavialis gangeticus Gavial	E	I	E

KEY TO SYMBOLS

ESA

E = Endangered
T = Threatened
T(S/A) = Threatened by Similiarity of Appearance

CITES

I = Appendix I listing
II = Appendix II listing

RDB

E = Endangered
T = Threatened
V = Vulnerable
I = Indeterminate
O = Out of Danger

* Different populations of the American alligator are listed on the U.S. Endangered Species Act as Endangered, Threatened, or Threatened by Similiarity of Appearance.

† Populations of Papua New Guinea are not included in these listings. Salt-water crocodiles from Papua New Guinea are listed on CITES Appendix II.